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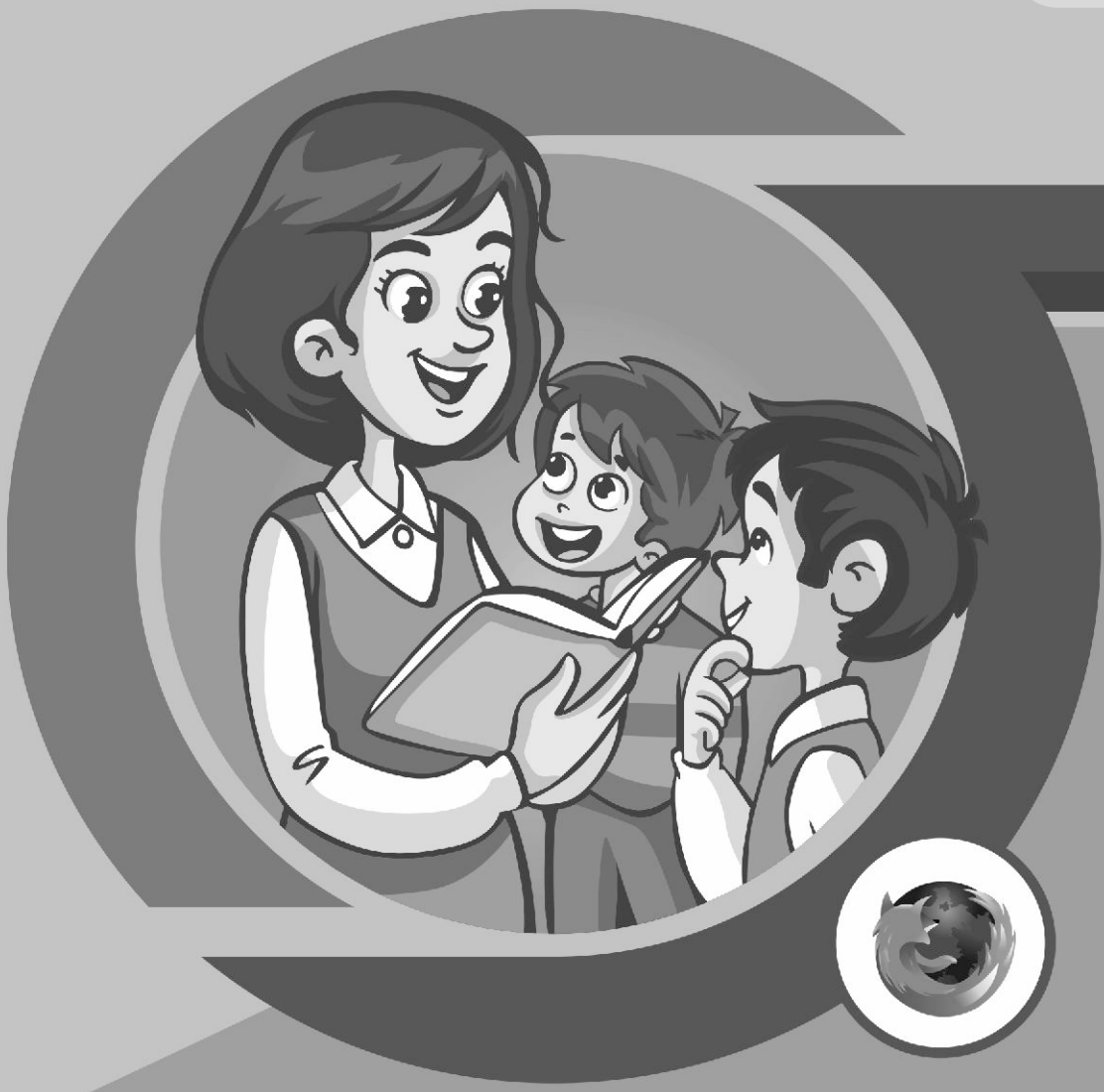
TECHIE TOTS
TECHER'S HANDBOOK

5 STD



Dear Sir / Madam,

Welcome to the Teacher's Handbook for "Techie Tots" – an innovative IT textbook designed to equip students from Grades 1 to 8 with essential digital literacy skills. This handbook is designed to support teachers in delivering engaging and effective IT instruction by providing:

- Clear learning objectives for each grade level.
- Curriculum-aligned lesson plans and activities.
- Assessment strategies to measure student progress.
- Tips for integrating technology into classroom instruction.
- Access to our Learning Management System (LMS) platform.

We understand that each classroom is unique, and the resources provided in this handbook can be adapted to meet the specific needs of your students and school environment. By fostering curiosity, creativity, and critical thinking skills, we aim to empower students to become confident users and creators of technology.

edufy publications
Jaffer Khan Colony Road, Kozhikode, Kerala, India-673004
www.edufypublications.com, edufypublishers@gmail.com
Tel: +918086511165

INDEX

SCHEME OF EXAMINATION

TWO TERM SCHEME

BOOKS	TERM I	TERM II
	LESSONS	LESSONS
BOOK 5	1, 2, 3,4	5, 6,7

THREE TERM SCHEME

BOOKS	TERM I	TERM II	TERM III
	LESSONS	LESSONS	LESSONS
BOOK 5	1, 2	3,4,5	6,7

Note: Questions for each terminal examination cover only the portions prescribed for it.

TT-V 1 GOOGLE APPS

General Objectives:

- To introduce students to the Google Apps suite and its various components.
- To familiarize students with the functionalities and benefits of Google Apps in everyday life.
- To develop students' digital literacy skills and enhance their ability to use online productivity tools effectively.

Learning Outcomes:

- Students can understand the concept of Google Apps and its components, including G Suite, Google Drive, and Google Maps.
- Students can identify the purpose and utility of each Google App, such as creating documents, storing files, and navigating with maps.
- Students can demonstrate the ability to access and utilize Google Apps for personal and educational purposes.
- Students can collaborate with peers using Google Docs, Sheets, and Slides, demonstrating real-time editing and sharing capabilities.
- Students can navigate Google Maps to locate places, plan routes, and explore geographical information.

Methodology:

Aim: To introduce students to the Google Apps suite and empower them with the necessary skills to utilize its various tools efficiently for personal and educational purposes.

Strategy: Begin by discussing the concept of Google Apps and its significance in modern technology. Use multimedia resources to showcase the features and functionalities of G Suite, Google Drive, and Google Maps. Provide guided practice sessions where students can explore Google Apps under supervision. Facilitate group activities where students work together using Google Docs, Sheets, and Slides to complete tasks. Discuss real-life scenarios where Google Apps can be beneficial, encouraging students to relate the lesson to their daily lives.

Expected Skills achieved by the learners: Digital Literacy and Problem-solving Skills.

Lesson Activities:

A Fill in the blanks

1. G-suite 2. Google Drive 3. Google earth 4. Google Map
5. Satellite 6. Username and password

B Match the following

1.Word processor 2. Spreadsheet 3. Presentation program
4. File storage 5. Web mapping

C Write T for True and F for False

1. T 2. F 3. F 4. F 5. F

•

D **Identify the following**

1. Google drive 2. Google sheet 3. Google Slide 4. Google Docs
5. Pegman

E **Answer the following**

1. Google Sheet, Google Slide, Google Docs and Google Drive.
2. Google Drive is a safe place for all your files and puts them within reach from any smartphone, tablet or computer. Files in Drive like your videos, photos and documents are backed up safely, so you can't lose them.
3. G Suite is a collection of Google application that brings together essential services including email , Google Drive, Google Docs, Google calendar etc.
4. Yellow character on the left side of the map is called Pegman icon.

TT-V 2 MORE ON MS WORD 2019

General Objectives:

- To familiarize students with the formatting features available in Microsoft Word 2019.
- To empower students with the skills to format text, align content, and adjust line spacing effectively using MS Word.
- To familiarize students with the process of inserting pictures and clipart in Microsoft Word 2019 documents.
- To enable them to insert WordArt in documents for decorative text effects and how to apply 3D styles to enhance the visual appeal of documents.

Learning Outcomes:

- Students can proficiently format text in MS Word by applying features such as font styles, sizes, and effects.
- Students can align text using different methods including left, right, centre and justify alignments.
- Students can understand and utilize line spacing options to enhance the readability of documents.
- · Students can insert pictures and clipart from various sources such as files, CDs, pen drives, internet, and online pictures.
- · Students can insert Word Art with different styles, apply 3D styles to objects and text within documents to enhance their visual appearance.

Methodology:

Aim: To equip students with essential skills in formatting documents using Microsoft Word, effectively insert and manipulate visual elements such as pictures, clipart, 3D styles, and Word Art in Microsoft Word 2019 documents.

Strategy: Begin the lesson with an introduction to the concept of formatting and its importance in document creation. Utilize interactive demonstrations using Microsoft Word to illustrate various formatting features such as font styles, sizes, and effects. Conduct hands-on activities where students practice formatting text, aligning content, and adjusting line spacing in sample documents. Introduce the concept of inserting pictures and clipart, demonstrating the process step-by-step.

Expected Skills achieved by the learners: Digital Literacy, Creativity Skills.

Lesson Activities:

A **Fill in the blanks**

1. Formatting 2. Paragraph 3.Clear formatting 4. Font
5.Text 6. font 7. Right alignment

B **Write T for True and F for False**

1. F 2.F 3. T 4. T

C **Multiple choice questions**

1. Illustrations 2.Text outline 3.WordArt 4.Strikethrough
5. Justify Alighn 6. Left Align

D **Write shortcut key for the following**

1. Ctrl + B 2. Ctrl + I 3. Ctrl + U 4. Ctrl + J 5. Ctrl + E 6. Ctrl + R
7. Ctrl + L 8. Ctrl + =

E **Match the following**

1. Illustration group 2. Text group 3. Conversions group 4. Font group

F **Identify the Alignment options**

a. Left Alignment b. Center Alignment c. Right Alignment d. Justify Alignment

G **Identify the following text**

1. Underline 2. Super script 3. Bold 4. upper case
5. Text highlight 6. Italic 7. Strikethrough

H **Answer the following**

1. WordArt is a gallery of text style that you can add to your Microsoft Office 2019 document to create decorative effects to the text.
2. Alignment means arranging words or documents in a more structured way.
3. Text Fill ,Text Outline ,Text effects
4. Within the Symbol drop down list in the Symbols Group on Insert tab click on More Symbols in the drop down list, you will get a Symbol window. Here you can insert the symbol from this window.

ASSESSMENT - 1

(Based on chapters 1 and 2)

A **Fill in the blanks**

1. Gmap 2. Clear Formatting 3. Font 4. maps.google.co.in

B **Write T for True and F for False**

1. T 2. F 3. T

C **Multiple choice questions**

1. Ctrl + E 2. WordArt

D **Answer the following**

1. Insert tab on the MS Word window is a collection of inserting tools. it helps to insert and modify tables, headers, footers, Lists, cover pages, pictures, chart, diagrams and other document building blocks.
2. Google Drive is a safe place for all your files and puts them within reach from any smartphone, tablet or computer. Files in Drive like your videos, photos and documents are backed up safely, so you can't lose them.
3. Text Fill ,Text Outline ,Text effects.

TT-V 3 MORE ON SCRATCH

General Objectives:

- To further enhance students' understanding of Scratch programming.
- To introduce students to advanced features of Scratch, including switching backdrops, working with multiple sprites, and understanding rotation styles.
- To enable students to create more complex Scratch projects incorporating various elements.

Learning Outcomes:

- Students can learn about switching backdrops and implement this feature in their Scratch projects.
- Students can work effectively with multiple sprites, including adding, deleting, and duplicating Sprites.
- Students can understand different rotation styles available in Scratch and apply them to Sprites in their projects.
- Students can manipulate the position and movement of sprites using X-Y coordinates.
- Students can create scripts to make sprites glide to specific locations on the stage.

Methodology:

Aim: To familiarize students with advanced Scratch programming concepts related to switching backdrops, working with multiple sprites, and adjusting rotation styles.

Strategy: Begin the lesson by revising concepts learned in the previous class, such as adding sprites and changing backgrounds. Explain the concept of switching backdrops and demonstrate how to do it using Scratch. Show students how to add, delete, and duplicate sprites.

- **Expected Skills achieved by the learners:** Cognitive Skills, Practical Skills.

Lesson Activities:

A **Fill in the blanks**

1. Three 2. 480, 360 3. Background 4. Control Block 5. Sprite
6. Sprite Header pane 7. X:240, Y: 180 8. Green flag

B **Multiple choice question**

1. X 2. Vertical 3. -240 4.

C **Identify these blocks**

a. Control block b. Events block c. Motion block d. Looks block

D **Write T for True and F for False**

1. T 2. F 3. F 4.T 5. T

E **Match the following**

1. 

2. 

3. 
4. 

G **Answer the following**

1. Click on the stage icon and import the desired background from the desired folder on the stage. The background is added on the stage as well as in the backdrop list under the Backdrop tab.
2. All round, left/right and do not rotate are the three button of rotation style.
3. Click on choose new sprite icon, select a sprite from folders in new sprite dialog box.
4. Scratch's coordinate system uses 2 coordinates, "X " and "Y " position, to determine the location of a sprite on the stage. The "X" value determines the horizontal location of the sprite and the "Y" value determines the vertical location or height.

TT-V 4 OPENSHOT VIDEO EDITING SOFTWARE

General Objectives:

- To familiarize students with the OpenShot video editing software.
- To enable students to understand the features and components of OpenShot.
- To introduce students to basic video editing concepts such as importing files, arranging clips, applying transitions, and adding effects.
- To empower students with the skills needed to create simple video projects using OpenShot.

Learning Outcomes:

- Students can understand the features and capabilities of OpenShot video editor.
- Students can identify the components of the OpenShot interface and their functions.
- Students can demonstrate the ability to import media files into OpenShot and arrange them on the timeline.
- Students can apply basic editing techniques such as trimming, slicing, and moving clips on the timeline.

- Students can utilize transition effects to enhance the visual flow between video clips.
- Students can add video effects and audio effects to enhance the quality and appeal of their projects.
- Students can create and customize titles for their video projects using the built-in title editor in OpenShot.

Methodology:

Aim: To engage students in hands-on learning experiences that facilitate their understanding and mastery of OpenShot video editing software.

Strategy: Begin the lesson by providing an overview of OpenShot video editing software, highlighting its user-friendly interface and key features. Demonstrate the process of starting OpenShot and navigating its interface, including the title bar, menu bar, toolbar, function tabs, and video preview section. Engage students in hands-on activities to practice importing media files, arranging them on the timeline, and applying transitions and effects. Facilitate guided practice sessions where students can experiment with editing clips, adjusting properties, and exploring advanced features like keyframe animation.

Expected Skills achieved by the learners: Problem-solving Skills and Technological Literacy.

Lesson Activities:

A **Fill in the blanks**

1. OSP 2. OpenShot 3.Transition 4. Time line
5. Project files 6. Menu

B **Multiple choice questions**

1. Razor Tool 2. Play Head 3. Video preview 4. Ruler

C **Write T for True and F for False**

1. T 2. F 3. F 4. F 5. F

D **Answer the following**

1. The OpenShot video editor is used for editing and creating videos.
2. Transition are applied to add special effects to the video. They are used to add connectivity to the consecutive scenes of a movie.
3. Title Bar : The title bar displays the application name and project name. it is placed at the the top of the OpenShot Video Editor window.
   Play Head : The vertical red line is the play head that represent the current playback position of the preview window.
4. Firstly click on the Export video option in the file menu. The export video dialog box will appears. Choose the desired format from the profile drop-down list. Click on the export video button. The export progress bar will appear at the bottom on the export video dialog box. you can also export your video by clicking on the export video icon located on toolbar.
5. Select the file from the project files pane that you want to add to the timeline. Then drag

the file and place it on to the track 4 in the timeline. the clip will now be added to timeline.

6. Openshot can support various video , audio, and image formats.
   You can add multiple tracks, image and audio file in one video.
   You can create 3D animated title for the video.

SEMESTER - 1

(Based on chapters 1,2,3 and 4)

A **Fill in the blanks**

1. Google drive 2. change case 3. Green flag 4. Menu 5. .osp

B **Write T for True and F for False**

1. F 2. F 3. T 4. F 5. F

C **Multiple choice questions**

1. Razor tool 2. -240 3. G Suite 4. Backdrop 5. Illustrations

D **Identify the following text effect**

1. Bold 2. Underline 3.Strike through 4. Subscript 5.Superscript

E **Match the following**

1. 

2. 

3. 
4. 

F **Answer the following**

1. Google Sheet, Google Slide, Google Docs and Google Drive.
2. Text Fill ,Text Outline ,Text effects
3. All round, left/right and do not rotate are the three button of rotation style.
4. Transition are applied to add special effects to the video. They are used to add connectivity to the consecutive scenes of a movie.

TT-V 5 MORE ON POWERPOINT 2019

General Objectives:

- To familiarize students with the basic concepts and functionalities of PowerPoint graphics.
- To equip students with the skills necessary to create visually appealing and engaging presentations using PowerPoint.

Learning Outcomes:

- Students can insert pictures and online pictures into PowerPoint slides.
- Students can understand the process of taking screenshots and creating photo albums in PowerPoint.
- Students can utilize illustrations group to insert shapes, SmartArt graphics, and charts into presentations.
- Students can insert tables and videos into PowerPoint slides.

- Students can apply different animation effects to text, pictures, and objects in PowerPoint.
- Students can utilize different views in presentation.

Methodology:

Aim: To enhance students' understanding and skills in using PowerPoint graphics effectively.

Strategy: The lesson will be conducted through a combination of theoretical explanations, practical demonstrations, and hands-on activities.

Expected Skills achieved by the learners: Problem-solving Skills and Creativity skills.

Lesson Activities:

A Fill in the blanks

1. Illustrations 2. F5 3. WordArt 4. Insert Tab 5. Insert Tab

B Multiple choice question

1. Hyperlink 2. Slide sorter 3. Chart 4. Photo Album 5. Notes Page **C**

Write T for True and F For False

1. F 2. T 3. F 4. F 5. T

D Match the following

1. Enter 2. Master Views 3. Presentation Views 4. Animations 5. Slides

E Answer the following

1. Click the Start From Beginning command on the Quick Access Toolbar or press the F5 key at the top of your keyboard. OR Select the Slide Show view command at the bottom of the PowerPoint window or Go to the Slide Show tab on the Ribbon to access more options.
2. Motion Path is an animation effect used to move an object or text in a specified path.
3. Photo Album is a presentation that you can create to display photographs.
4. Select the text. On the Animations tab, click on the More Button in the Animation group. Then you can see various types of Animation effects in the drop down list. Click on Split Animation effect. Select Vertical In option from Effect Options. Click on Animation Pane in Advanced Animation group. Then Animation pane will be opened in the right side of the window. Click on Start On Click from Animation Pane drop down list. Select Effect Option from the Animation Pane drop down window. Select Applause from the Sound combo box. Select By letter from the Animate text combo box. Click on OK button. Click on the Play button of the Animation pane.
5. A SmartArt graphic is a visual representation of information and ideas. It is used to communicate messages quickly, easily and effectively.
6. You can preview animation by clicking preview option preview group on the animation tab. This option is activated only when an animation is given to the text or slide.
7. Transitions are animations that you can use when advancing from one slide to the next during a presentation.

TT-V | 6 | INTRODUCTION TO EXCEL 2019

General Objectives:

- To introduce students to Microsoft Excel 2019.
- To familiarize students with the basic features and functionalities of MS Excel.
- To equip students with the skills necessary to modify worksheets and work with workbooks.

Learning Outcomes:

- Students can understand the concept of electronic spreadsheets and their significance.
- Students can navigate through MS Excel interface efficiently.
- Students can modify and edit data within a worksheet.
- Students can create and manage multiple worksheets within a workbook.
- Students can utilize basic formatting options to enhance the appearance of worksheets.
- Students can save and close Excel workbooks effectively.

Methodology:

Aim: To provide students with a comprehensive understanding of Microsoft Excel 2019 and its basic functionalities.

Strategy: The lesson will be delivered through a combination of theoretical explanations, practical demonstrations, and hands-on exercises to ensure active engagement and understanding.

Expected Skills achieved by the learners: Practical skills, Time Management skills and Presentation Skills.

Lesson Activities:

A Fill in the blanks

1. Spreadsheet 2. quickly and easily 3. Blank 4. F2 5. Cell 6. Worksheet

B Multiple choice questions

1. Workbook 2. Columns 3. Sheet 1 4. Merge 5. File

C Write T for True and F for False

1. F 2. T 3. T 4. T 5. T

D Match the following

1. To go First Row 2. To go Last row 3.To go Last Column 4. To go First Column

E Answer the following

1. Excel worksheet enables you to carry out complex arithmetic calculations and logical operations such as addition, multiplication, subtractions etc. It helps to easily generate reports and prepare graphs.
2. Spreadsheet contains data and information arranged in rows and columns . MS Excel spreadsheet is called an electronic spreadsheet.

3. Merging cells means combining two or more adjacent cells into one cell.
4. To change the row height, select the entire row and right click on it. Select the Row Height option from the popup menu, enter a new size of row in the Row Height box and click on OK button. You can also change the Row height by the directional arrow tool at the row heading margin.
5. There are 16384 columns and 1048576 rows in a worksheet.
6. Click on Start button, select Microsoft Office and choose Microsoft Excel 2019. A new workbook window will appear. From here select blank workbook.
7. To close Excel workbook, select close option from the File tab. Before closing a workbook, you should save it to avoid data loss.

ASSESSMENT - 2

(Based on chapters 5 and 6)

A Fill in the blank

1. Blank 2. ..... is an intersection of rows and columns. ans) Cell
3. Spreadsheet 4. ..... is the shortcut key for reading view. ans) F5

B Write T for True and F For False

1. F 2. T 3. T

C Multiple choice questions

1. SmartArt 2. File

D Answer the following

1. Merging cells means combining two or more adjacent cells into one cell.
2. Spreadsheet contains data and information arranged in rows and columns . MS Excel spreadsheet is called an electronic spreadsheet.
3. Motion Path is an animation effect used to move an object or text in a specified path.

TT-V 7 LOGICAL REASONING

General Objectives:

• To enhance students' cognitive abilities and critical thinking skills through activities aimed at improving numerical, visual, and analytical skills, developing problem-solving abilities, and fostering creativity and goal-setting.

Learning Outcomes:

• Students can demonstrate improved numerical, visual, and analytical skills through participation in various activities.

• Students can apply problem-solving strategies to effectively tackle various challenges presented in the activities.

• Students can generate creative ideas and set achievable goals based on the outcomes of the activities.

Methodology:

Aim: To engage students in a variety of activities to enhance their logical reasoning skills and foster critical thinking abilities.

Strategy: Begin by introducing students the concept of logical reasoning and its importance in everyday life. Explain how logical reasoning skills can be developed through engaging activities. Choose a variety of activities from the provided list that align with the learning objectives. Demonstrate the first activity to the students, providing step-by-step instructions and modelling problem-solving strategies. Guide students in setting personal goals for improving their logical reasoning skills based on their performance in the activities.

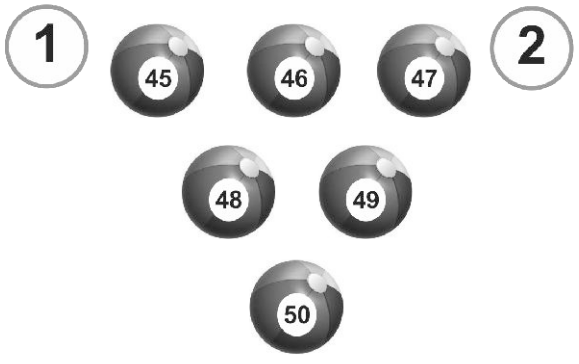
Expected Skills achieved by the learners: Numerical, Visual & analytical skills and Problem-solving skills.

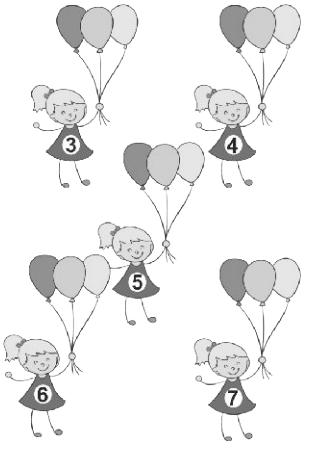
Lesson Activities:

1. Count the basic shapes

1	Square - 4	Rectangle - 4	Triangle - 5	Circle - 4	Oval - 4	Stars - 0
2	Square -1	Rectangle - 9	Triangle - 9	Circle - 4	Oval - 2	Stars - 0

2. Complete the number sequence by writing the missing numbers on the objects back. Then match the numbers to the correct set by drawing lines.





3. Choose the image that continuous the pattern.

D

4. Riddles

1. Roosters don't lay eggs.

2. Friday 3. Once, because after you subtract 5 from 25 it becomes 20.

4. echo 5. 21 shakes hands

5. Sudoku

				1		4		
	2		6					5
3	9				7			1
5				6			3	
	6						8	
	3			8				7
9			2				5	6
4					5		2	
		2		3				

	1	2	3	4	5	6	7	8	9
A	6	7	5	3	1	2	4	9	8
B	8	2	1	6	9	4	3	7	5
C	3	9	4	8	5	7	2	6	1
D	5	4	8	7	6	9	1	3	2
E	1	6	7	4	2	3	5	8	9
F	2	3	9	5	8	1	6	4	7
G	9	1	3	2	4	8	7	5	6
H	4	8	6	1	7	5	9	2	3
I	7	5	2	9	3	6	8	1	4

Solution Steps

Here you can view the logical steps used to solve the sudoku puzzle.

Step 1: Naked Single in cell (C8)

The cell has a single candidate with the value 6

Actions:

Cell solved with the value 6.

Candidate 6 removed from cells (C3, C7, A8, F8)

Step 2: Hidden Single in cell (F7)

The cell is the only cell in row F with the candidate value 6

Actions:

Cell solved with the value 6.

Step 3: Hidden Single in cell (F4)

The cell is the only cell in row F with the candidate value 5

Actions:

Cell solved with the value 5.

Candidate 5 removed from cells (A4, C4, E4, E5)

Step 4: Hidden Single in cell (E7)

The cell is the only cell in row E with the candidate value 5

The cell is the only cell in row E with the candidate value 5

Actions:

Cell solved with the value 5.

Step 5: Hidden Single in cell (H3)

The cell is the only cell in row H with the candidate value 6

Actions:

Cell solved with the value 6.

Candidate 6 removed from cells (A3, I1)

Step 6: Hidden Single in cell (A1)

The cell is the only cell in row A with the candidate value 6

Actions:

Cell solved with the value 6.

Step 7: Hidden Single in cell (I6)

The cell is the only cell in row I with the candidate value 6

Actions:

Cell solved with the value 6.

Step 8: Hidden Single in cell (I2)

The cell is the only cell in row I with the candidate value 5

Actions:

Cell solved with the value 5.

Candidate 5 removed from cells (A2)

Step 9: Hidden Single in cell (A3)

The cell is the only cell in row A with the candidate value 5

Actions:

Cell solved with the value 5.

Candidate 5 removed from cells (C3)

Step 10: Hidden Single in cell (C5)

The cell is the only cell in row C with the candidate value 5

Actions:

Cell solved with the value 5.

Step 11: Hidden Single in cell (C7)

The cell is the only cell in row C with the candidate value 2

Actions:

Cell solved with the value 2.

Candidate 2 removed from cells (D7, A9)

Step 12: Hidden Single in cell (A6)

The cell is the only cell in row A with the candidate value 2

Actions:

Cell solved with the value 2.

Candidate 2 removed from cells (D6, E6, F6)

Step 13: Hidden Single in cell (D9)

The cell is the only cell in row D with the candidate value 2

Actions:

Cell solved with the value 2.

Candidate 2 removed from cells (E9)

Step 14: Hidden Single in cell (F1)

The cell is the only cell in row F with the candidate value 2

Actions:

Cell solved with the value 2.

Candidate 2 removed from cells (E1)

Step 15: Hidden Single in cell (E5)

The cell is the only cell in row E with the candidate value 2

Actions:

Cell solved with the value 2.

Step 16: Hidden Single in cell (D2)

The cell is the only cell in column 2 with the candidate value 4

Actions:

Cell solved with the value 4.

Candidate 4 removed from cells (D3, D4, D6, E3, F3)

Step 17: Hidden Single in cell (D3)

The cell is the only cell in row D with the candidate value 8

Actions:

Cell solved with the value 8.

Candidate 8 removed from cells (B3, C3, G3)

Step 18: Naked Single in cell (C3)

The cell has a single candidate with the value 4

Actions:

Cell solved with the value 4.

Candidate 4 removed from cells (C4, B3)

Step 19: Naked Single in cell (C4)

The cell has a single candidate with the value 8

Actions:

Cell solved with the value 8.

Candidate 8 removed from cells (A4, H4, I4, B6)

Step 20: Hidden Single in cell (D4)

The cell is the only cell in row D with the candidate value 7

Actions:

Cell solved with the value 7.

Candidate 7 removed from cells (E4, H4, I4)

Step 21: Hidden Single in cell (G3)

The cell is the only cell in column 3 with the candidate value 3

Actions:

Cell solved with the value 3.

Candidate 3 removed from cells (G7)

Step 22: Hidden Single in cell (G6)

The cell is the only cell in column 6 with the candidate value 8

Actions:

Cell solved with the value 8.

Candidate 8 removed from cells (G2, G7)

Step 23: Hidden Single in cell (G5)

The cell is the only cell in row G with the candidate value 4.

Actions:

Cell solved with the value 4.

Candidate 4 removed from cells (B5, I4)

Step 24: Naked Single in cell (B5)

The cell has a single candidate with the value 9

Actions:

Cell solved with the value 9.

Candidate 9 removed from cells (B6, B7, B8, H5, A4)

Step 25: Naked Single in cell (A4)

The cell has a single candidate with the value 3

Actions:

Cell solved with the value 3.

Candidate 3 removed from cells (A9, E4, B6)

Step 26: Naked Single in cell (B8)

The cell has a single candidate with the value 7

Actions:

Cell solved with the value 7.

Candidate 7 removed from cells (B1, B3, B7, A8, I8)

Step 27: Naked Single in cell (H5)

The cell has a single candidate with the value 7

Actions:

Cell solved with the value 7.

Candidate 7 removed from cells (H2, H7)

TT-V | 8 | MORE ON AI

General Objectives:

- To introduce students to advanced concepts and exciting facts about artificial intelligence (AI) and its applications.

Learning Outcomes:

- Students can explain and discuss exciting facts related to AI, including advancements in technology and its impact on society.
- Students can identify key developments and achievements in the field of AI, such as Elon Musk's involvement in autonomous vehicles and the emergence of AI-powered pets.
- Students can analyse the potential implications of AI advancements, such as the ability to read minds and the concept of robot citizenship.
- Students can recognize individuals who have made significant contributions to the field of AI, such as Tanmay Bakshi and their impact on technology.
- Students can understand the significance of data in AI systems and its role in enabling machine learning and decision-making processes.

Methodology:

Aim: To engage students in a dynamic and interactive learning experience that promotes critical thinking and understanding of AI concepts.

Strategy: Begin the lesson by presenting students with intriguing facts about AI, such as Elon Musk's fortune and the development of AI-powered pets, to capture their interest and curiosity. Utilize multimedia resources, such as images and videos, to illustrate key concepts and achievements in the field of AI. Facilitate discussions and group activities to encourage active participation and collaborative learning. Incorporate real-life examples and case studies to demonstrate the practical applications of AI technology in various domains. Encourage students to ask questions and express their opinions, fostering a deeper understanding of the ethical and societal implications of AI advancements.

Expected Skills achieved by the learners: Ethical Awareness, Digital Literacy and Critical Thinking Skills.

Lesson Activities:

A Fill in the blanks

1. Tesla 2. Sophia 3. Data 4. Auto-correction

B Answer the following

1. Data plays a fundamental role in AI as it serves as the foundation training, validating, and improving AI models. Data can be texts, numbers, audios, videos, images or it could be facts that are stored inside a person's mind.
2. Elon Musk’s fortune: The world's second richest person Mr Musk's net worth jumped

from $7.2bn to $128bn after the share values of his car firm Tesla grew

2025 - The year of the pet bots: Although real pets are lovable, they have a few demerits. They need to be fed, cleaned up, and they pass away.

AI can read your mind: A new methodology has been developed by the company Neuralink, which uses a sensor called N1. This sensor could read and transmit data wirelessly from our brain. The thoughts in the form of signals transmitted by these sensors can be decoded using AI technology.

3. Auto-correction, also known as text replacement, replace-as-you-type or simply autocorrect, is an automatic data validation function commonly found in word processors and text editing interfaces for smartphones and tablet computers.

ASSESSMENT - 2

(Based on chapters 5 and 6)

A Fill in the blanks

1. Neuralink 2. Blank 3. cell 4. Auto-correction

B Write T for True and F For False

1. T 2. T 3. T 4. T

C Multiple choice questions

1. Column 2. Merge 3. Saudi Arabia 4.Exciting

D Match the following

1. F5 2. Enter,Pagedown, N 3. Backspace, Page Up, P
4. Slide number + Enter 5. Ctrl+P

E Count the basic shapes

Square - 4 Rectangle - 4 Triangle - 5 Circle - 4 Oval - 4 Stars - 0

F Answer the following

1. Data plays a fundamental role in AI as it serves as the foundation training, validating, and improving AI models. Data can be texts, numbers, audios, videos, images or it could be facts that are stored inside a person's mind.
2. Motion Path is an animation effect used to move an object or text in a specified path.
3. Auto-correction, also known as text replacement, replace-as-you-type or simply autocorrect, is an automatic data validation function commonly found in word processors and text editing interfaces for smartphones and tablet computers.
4. Transitions are animations that you can use when advancing from one slide to the next during a presentation.
5. Elon Musk's fortune: The world's second richest person Mr Musk's net worth jumped from $7.2bn to $128bn after the share values of his car firm Tesla grew

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